

Claims

1. (original) A regulator unit, in particular for varying an exciter current, preferably for generators of motor vehicles, having a housing (13), in which the housing (13) has a wiper contact mounting region (16) with a guide (19) and wiper contacts (22) seated therein, having a regulator housing portion (25), in which an electronic controller unit and a regulator heat sink (28) are received, having a plug element (31) for electrically connecting the regulator unit (10) to external contact elements, and in which the regulator unit (10) has a first through opening (34) and a second through opening (37), by means of which openings the regulator unit (10) can be fastened to a housing (40) by means of two bolt elements (34), characterized in that the regulator heat sink (28) is located between the wiper contact mounting region (16) and the plug element (31).

2. (original) The regulator unit in accordance with claim 1, characterized in that the wiper contact mounting region (16) is located asymmetrically between the first through opening (34) and the second through opening (37).

3. (currently amended) The regulator unit in accordance with claim 1 ~~or 2~~, characterized in that the guide (19) of the wiper contact mounting region (16) has a center line (43), whose shortest spacing from the first through opening (34) is at maximum 20 mm.

4. (currently amended) The regulator unit in accordance with ~~one of claims 1 through 3~~ claim 1, characterized in that the guide (19) of the wiper contact mounting region (16) has a center line (43) which is oriented in a direction of motion of the wiper contacts (22), and the first through opening (34) has an angular spacing a from the center line (43), and the second through opening (37) has an angular spacing b from the center line (43), and the ratio between b and a is between 5.2 and 6.0, preferably between 5.4 and 5.6.

5. (currently amended) The regulator unit in accordance with ~~one of claims 1 through 4~~ claim 1, characterized in that between the second through opening (37) and the wiper contact mounting region (16), there is a further fastening point (46), whose spacing from the second through opening (37) is between 11 mm and 36 mm.

6. (original) The regulator unit in accordance with claim 5, characterized in that the second through opening (37) and the further fastening point (46) each have one bearing face (49) for a mounting element (52), and the bearing faces (49) are located at different levels in the axial direction of the through opening, preferably being spaced apart in this direction by up to 5 mm.

7. (currently amended) The regulator unit in accordance with ~~one of the foregoing claims~~ claim 1, characterized in that the wiper contact mounting region (16) and the plug element (31) are located between the first through opening (34) and the second through opening (37).

8. (currently amended) The regulator unit in accordance with ~~one of the foregoing claims~~ claim 1, characterized in that the wiper contact mounting region (16) with its guide (19), the regulator housing portion (25), and the plug element (31) are integrally with one another a single housing part.

9. (currently amended) A generator for motor vehicles, having a housing (40) and a regulator unit (10) in accordance with ~~one of the foregoing claims~~ claim 1, characterized in that the regulator unit is fastened by means of two bolt elements to a rectifier heat sink and to a connection plate.

10. (original) The generator in accordance with claim 9, characterized in that the generator has an axis of rotation (55), from which the first through opening (34) has a spacing R1 and the second through opening (37) has a spacing R2, and R1 is greater by between 5% and 10%.

11. (original) The generator in accordance with claim 10, characterized in that one fastening point (58) serves the purpose of contacting and fastening to a connection plate and is located between the first through opening (34) and the axis of rotation (55).

12. (original) The generator in accordance with claim 11, characterized in that the fastening point (58) is located in a corridor between the first through opening (34) and the axis of rotation (55), and the corridor amounts to between +3 mm and -3 mm with respect to a connecting line between the first through opening

(34) and the axis of rotation (55).

13. (currently amended) The generator in accordance with ~~one of claims 9 through 12~~ claim 9, characterized in that the regulator housing portion (25) has a spacing from the end plate (40) in the direction of the axis of rotation of between 0.5 and 5 mm, and preferably between 1.8 and 3.2.

14. (currently amended) The generator in accordance with ~~one of claims 9 through 13~~ claim 9, characterized in that the regulator unit (10) is fastened to the housing (40) by means of the two bolt elements in such a way that it is prestressed by means of bearing points.